TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 580-16467-1

Job Description: Rainier Commons

For:
Clean Harbors Environmental Services Inc
19320 Des Moines Memorial Dr
Bldg D, Suite 400
Seatac, WA 98148

Attention: Shawn Estrada

Approved for release
Heather Curbow
Project Manager I
11/19/2009 8:17 AM

Heather Curbow
Project Manager I
heather.curbow@testamericainc.com
11/19/2009

TestAmerica Tacoma is a part of TestAmerica Laboratories, Inc.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan and meet all requirements of NELAC. All data have been found to be compliant with laboratory protocol, with the exception of any items noted in the case narrative.

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ACCREDITED IN ACCORDANCE WITH nelac

RCLLC 0001493

METHOD SUMMARY

Client: Clean Harbors Environmental Services Inc

Job Number: 580-16467-1

Description	Lab Location	Method	Preparation Method
Matrix: Solid			
Polychlorinated Biphenyls (PCBs) by Gas Chromatography	TAL TAC	SW846 8082	
Ultrasonic Extraction	TAL TAC		SW846 3550B
Metals (ICP)	TAL TAC	SW846 6010B	
Preparation, Metals	TAL TAC		SW846 3050B
Percent Moisture	TAL TAC	EPA Moisture	

Lab References:

TAL TAC = TestAmerica Tacoma

Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: Clean Harbors Environmental Services Inc

Job Number: 580-16467-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
580-16467-1	RC 110909	Solid	11/08/2009 0000	11/09/2009 1507

Client: Clean Harbors Environmental Services Inc

Job Number: 580-16467-1

Client Sample ID: **RC 110909**

Lab Sample ID: 580-16467-1
Client Matrix: Solid
% Moisture: 4.5

Date Sampled: 11/08/2009 0000
Date Received: 11/09/2009 1507

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 580-54014	Instrument ID: TAC042
Preparation:	3550B	Prep Batch: 580-53761	Initial Weight/Volume: 10.5382 g
Dilution:	1.0		Final Weight/Volume: 10 mL
Date Analyzed:	11/13/2009 1927		Injection Volume:
Date Prepared:	11/10/2009 1316		Result Type: PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
PCB-1016		ND		0.0099
PCB-1221		ND		0.0099
PCB-1232		ND		0.0099
PCB-1242		ND		0.0099
PCB-1248		ND		0.0099

Surrogate	%Rec	Qualifier	Acceptance Limits
Tetrachloro-m-xylene	85		45 - 155
DCB Decachlorobiphenyl	77		60 - 125

Client: Clean Harbors Environmental Services Inc

Job Number: 580-16467-1

Client Sample ID: RC 110909

Lab Sample ID: 580-16467-1
Client Matrix: Solid
% Moisture: 4.5

Date Sampled: 11/08/2009 0000
Date Received: 11/09/2009 1507

8082 Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Method:	8082	Analysis Batch: 580-54029		Instrument ID:	TAC042
Preparation:	3550B	Prep Batch: 580-53761		Initial Weight/Volume:	10.5382 g
Dilution:	10			Final Weight/Volume:	10 mL
Date Analyzed:	11/15/2009 2046			Injection Volume:	
Date Prepared:	11/10/2009 1316			Result Type:	PRIMARY

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
PCB-1254		5.4		0.099
PCB-1260		3.4		0.099

Client: Clean Harbors Environmental Services Inc

Job Number: 580-16467-1

Client Sample ID: **RC 110909**

Lab Sample ID: 580-16467-1
Client Matrix: Solid
% Moisture: 4.5

Date Sampled: 11/08/2009 0000
Date Received: 11/09/2009 1507

6010B Metals (ICP)

Method:	6010B	Analysis Batch: 580-54273		Instrument ID:	SEA027
Preparation:	3050B	Prep Batch: 580-54220		Lab File ID:	N/A
Dilution:	1.0			Initial Weight/Volume:	1.0486 g
Date Analyzed:	11/18/2009 1703			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2009 1052				

Analyte	DryWt Corrected: Y	Result (mg/Kg)	Qualifier	RL
Lead		27		1.5

General Chemistry

Client Sample ID: **RC 110909**

Lab Sample ID: 580-16467-1 Date Sampled: 11/08/2009 0000
Client Matrix: Solid Date Received: 11/09/2009 1507

Analyte	Result	Qual	Units	RL	Dil	Method
Percent Solids	96		%	0.10	1.0	Moisture
	Analysis Batch: 580-53806		Date Analyzed: 11/11/2009 0848			DryWt Corrected: N
Percent Moisture	4.5		%	0.10	1.0	Moisture
	Analysis Batch: 580-53806		Date Analyzed: 11/11/2009 0848			DryWt Corrected: N

Client: Clean Harbors Environmental Services Inc

Job Number: 580-16467-1

Method Blank - Batch: 580-53761

Method: 8082
Preparation: 3550B

Lab Sample ID: MB 580-53761/1-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/13/2009 1810
Date Prepared: 11/10/2009 1316

Analysis Batch: 580-54014
Prep Batch: 580-53761
Units: mg/Kg

Instrument ID: TAC042
Lab File ID: ccl014729.D
Initial Weight/Volume: 10 g
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
PCB-1016	ND		0.010
PCB-1221	ND		0.010
PCB-1232	ND		0.010
PCB-1242	ND		0.010
PCB-1248	ND		0.010
PCB-1254	ND		0.010
PCB-1260	ND		0.010

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	92	45 - 155
DCB Decachlorobiphenyl	93	60 - 125

Lab Control Sample - Batch: 580-53761

Method: 8082
Preparation: 3550B

Lab Sample ID: LCS 580-53761/2-A
Client Matrix: Solid
Dilution: 1.0
Date Analyzed: 11/13/2009 1825
Date Prepared: 11/10/2009 1316

Analysis Batch: 580-54014
Prep Batch: 580-53761
Units: mg/Kg

Instrument ID: TAC042
Lab File ID: ccl014730.D
Initial Weight/Volume: 10 g
Final Weight/Volume: 10 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
PCB-1016	0.100	0.0850	85	40 - 140	
PCB-1260	0.100	0.101	101	60 - 130	

Surrogate	% Rec	Acceptance Limits
Tetrachloro-m-xylene	90	45 - 155
DCB Decachlorobiphenyl	93	60 - 125

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: Clean Harbors Environmental Services Inc

Job Number: 580-16467-1

Method Blank - Batch: 580-54220

Method: 6010B
Preparation: 3050B

Lab Sample ID:	MB 580-54220/11-A	Analysis Batch:	580-54273	Instrument ID:	SEA027
Client Matrix:	Solid	Prep Batch:	580-54220	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/Kg	Initial Weight/Volume:	1 g
Date Analyzed:	11/18/2009 1613			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2009 1052				

Analyte	Result	Qual	RL
Lead	ND		1.5

Lab Control Sample/
Lab Control Sample Duplicate Recovery Report - Batch:

Method: 6010B
Preparation: 3050B

LCS Lab Sample ID:	LCS 580-54220/12-A	Analysis Batch:	580-54273	Instrument ID:	SEA027
Client Matrix:	Solid	Prep Batch:	580-54220	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/Kg	Initial Weight/Volume:	1 g
Date Analyzed:	11/18/2009 1616			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2009 1052				

LCSD Lab Sample ID:	LCSD 580-54220/13-A	Analysis Batch:	580-54273	Instrument ID:	SEA027
Client Matrix:	Solid	Prep Batch:	580-54220	Lab File ID:	N/A
Dilution:	1.0	Units:	mg/Kg	Initial Weight/Volume:	1 g
Date Analyzed:	11/18/2009 1619			Final Weight/Volume:	50 mL
Date Prepared:	11/18/2009 1052				

	% Rec.						
Analyte	LCS	LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Lead	89	92	80 - 120	4	35		

Calculations are performed before rounding to avoid round-off errors in calculated results.

CleanHarbors
ENVIRONMENTAL SERVICES®

CHAIN OF CUSTODY RECORD PAGE _____ OF _____ 16467

☐ 1 Hill Avenue, Braintree, MA 02184 Tel. (781) 849-1800 ☐ RTE. 2, Box 170, Waynoka, OK 73860 Tel. (580) 697-3500 ☐ 12400 247th Avenue SE, Sawyer, ND 58781 Tel. (701) 624-5622
☐ 2202 Genoa Red Bluff Road, Houston, TX 77034 Tel. (281) 478-7700 ☐ 5295 S. Garvey Road, Westmorland, CA 92281 Tel. (760) 344-9400 ☐ Other

Client: CLEAN HARBORS Project Name: Rainier Commons Work Order/P.O. #: 6725066 Date: 9/09/09

Report To: Shawn Estrada Address: _____ Phone #: _____

Sample I.D.	Sampling Information: Date	Time	Station Location	Sample Matrix	Analysis: 6010B LEAD	8082 PCB									# of con.	CHES Sample #
RC 110909	9/09/09			Solid	X	X										

Relinquished by Sampler: Shawn Parker/Estrada
Date: 9/09/09 Time: 1507
Received by: Cathy Gamble
Date: 11/9/09 Time: 15:07
Relinquished by Sampler: _____
Date: _____ Time: _____
Received by: _____
Date: _____ Time: _____

VOA Vial
Glass Bottle
Plastic Bottle
Preservation
Volume
DOT Shipping Name:

COMMENTS: (Fax Number, cautions, special instructions)
T2: 20.8
hand delivered
w/c
no ice
no cooler

Standard laboratory turnaround time is 1 week from date of receipt. Accelerated turnaround may be assessed a surcharge.

Location of samples: _____
Turnaround: 24 Hrs. 48 Hrs. 1 Week Other: Std.

CH 119

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OFFICE COPY

Login Sample Receipt Check List

Client: Clean Harbors Environmental Services Inc

Job Number: 580-16467-1

Login Number: 16467
Creator: Gamble, Cathy
List Number: 1

List Source: TestAmerica Tacoma

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	hand del
Cooler Temperature is acceptable.	True	received same day as sampled
Cooler Temperature is recorded.	True	20.8c IR gun
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Is the Field Sampler's name present on COC?	True	
Sample Preservation Verified	True	